AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claim 1-24 (Canceled)

Claim 25 (Previously Presented): A system comprising:

a source device profile interpreter that interprets a source device profile to convert coordinates in a source device color space to a device-independent color space;

a destination device profile interpreter that interprets a destination device profile to convert coordinates in a destination device color space to the device-independent color space; and

a color transformer that generates a color map defining a relationship between the source and destination device color spaces based on the converted coordinates and user preferences specified by a user independently of the source and destination device profiles.

Claim 26 (Previously Presented): The system of claim 25, wherein the user preferences include illuminant functions.

Claim 27 (Previously Presented): The system of claim 25, wherein the user preferences include observer functions.

Claim 28 (Previously Presented): The system of claim 25, wherein the color transformer adjusts the source and destination device profile interpreters based on the user preferences.

Claim 29 (Previously Presented): The system of claim 25, wherein the source and destination profile interpreters are configured as removable plug-in modules for use by the color transformer.

Claim 30 (Previously Presented): The system of claim 25, wherein the source and destination device profile interpreters are configured based on white- and black-point parameters to account for color variations between media and colorants used by different color display devices.

Claim 31 (Previously Presented): The system of claim 25, wherein the source and destination device profile interpreters are configured based on pleasing color corrections.

Claim 32 (Previously Presented): The system of claim 25, wherein the color transformer generates the color map in part by reducing color error between the converted coordinates from the source and destination device profile interpreters.

Claim 33 (Currently Amended): A system comprising:

a source device profile interpreter that interprets a source device profile to convert coordinates in a source device color space to a device-independent color space;

a destination device profile interpreter that interprets a destination device profile to convert coordinates in a destination device color space to the device-independent color space; and

a color transformer that generates a color map defining a relationship between the source and destination device color spaces based on the converted coordinates and user preferences specified by a user independently of the source and destination device profiles,

wherein the color transformer generates the color map in part by reducing color error between the converted coordinates from the source and destination device profile interpreters, and

~~The system of claim 32,~~ wherein the source and destination device profile interpreters use forward transformation profiles to produce the converted coordinates, and the color transformer adjusts coordinates in the destination device color space to reduce the color error, the color map being based in part on the adjusted coordinates in the destination device color space.

Claim 34 (Previously Presented): The system of claim 25, wherein the source device profile contains raw spectral data that characterizes a source device, and the destination device profile contains raw spectral data that characterizes a destination device.

Claim 35 (Previously Presented): The system of claim 25, wherein each of the source and destination device profiles defines a forward transformation from one of the source and destination color spaces to the device-independent color space.

Claim 36 (Previously Presented): The system of claim 25, wherein the color map includes a look-up table.

Claim 37 (Previously Presented): The system of claim 25, wherein the color map includes a mathematical expression.

Claim 38 (Previously Presented): A system comprising:

means for interpreting a source device profile to convert coordinates in a source device color space to a device-independent color space;

means for interpreting a destination device profile to convert coordinates in a destination device color space to the device-independent color space; and

means for generating a color map defining a relationship between the source and destination device color spaces based on the converted coordinates and user preferences specified by a user independently of the source and destination device profiles.

Claim 39 (Previously Presented): The system of claim 38, wherein the user preferences include illuminant functions.

Claim 40 (Previously Presented): The system of claim 38, wherein the user preferences include observer functions.

Claim 41 (Previously Presented): A method comprising:

interpreting a source device profile to convert coordinates in a source device color space to a device-independent color space;

interpreting a destination device profile to convert coordinates in a destination device color space to the device-independent color space; and

generating a color map defining a relationship between the source and destination device color spaces based on the converted coordinates and user preferences specified by a user independently of the source and destination device profiles.

Claim 42 (Previously Presented): The method of claim 41, wherein the user preferences include illuminant functions.

Claim 43 (Previously Presented): The method of claim 41, wherein the user preferences include observer functions.

Claim 44 (Previously Presented): A data storage medium storing computer code that, when executed:

interprets a source device profile to convert coordinates in a source device color space to a device-independent color space;

interprets a destination device profile to convert coordinates in a destination device color space to the device-independent color space; and

generates a color map defining a relationship between the source and destination device color spaces based on the converted coordinates and user preferences specified by a user independently of the source and destination device profiles.

Claim 45 (Previously Presented): The data storage medium of claim 44, wherein the user preferences include illuminant functions.

Claim 46 (Previously Presented): The data storage medium of claim 44, wherein the user preferences include observer functions.

Claim 47 (New): A system comprising:

means for interpreting a source device profile to convert coordinates in a source device color space to a device-independent color space;

means for interpreting a destination device profile to convert coordinates in a destination device color space to the device-independent color space; and

means for generating a color map defining a relationship between the source and destination device color spaces based on the converted coordinates and user preferences specified by a user independently of the source and destination device profiles,

wherein the means for generating a color map generates the color map in part by reducing color error between the converted coordinates from the source and destination device profile interpreters, the means for interpreting the source and destination device profiles use forward transformation profiles to produce the converted coordinates, and the means for generating a color map adjusts coordinates in the destination device color space to reduce the color error, the color map being based in part on the adjusted coordinates in the destination device color space.

Claim 48 (New): The system of claim 47, wherein the user preferences include illuminant functions.

Claim 49 (New): The system of claim 47, wherein the user preferences include observer functions.

Claim 50 (New): The system of claim 47, wherein the means for generating a color map adjusts the means for interpreting the source and destination device profiles based on the user preferences.

Claim 51 (New): A method comprising:

interpreting a source device profile to convert coordinates in a source device color space to a device-independent color space;

interpreting a destination device profile to convert coordinates in a destination device color space to the device-independent color space; and

generating a color map defining a relationship between the source and destination device color spaces based on the converted coordinates and user preferences specified by a user independently of the source and destination device profiles,

wherein generating a color map including generating the color map in part by reducing color error between the converted coordinates from the source and destination device profile interpreters, interpreting the source and destination device profiles includes using forward transformation profiles to produce the converted coordinates, and generating a color map includes adjusting coordinates in the destination device color space to reduce the color error, the color map being based in part on the adjusted coordinates in the destination device color space.

Claim 52 (New): The method of claim 51, wherein the user preferences include illuminant functions.

Claim 53 (New): The method of claim 51, wherein the user preferences include observer functions.

Claim 54 (New): A system comprising:

a source device profile interpreter that interprets a source device profile to convert coordinates in a source device color space to a device-independent color space;

a destination device profile interpreter that interprets a destination device profile to convert coordinates in a destination device color space to the device-independent color space; and

a color transformer that generates a color map defining a relationship between the source and destination device color spaces based on the converted coordinates and user preferences specified by a user independently of the source and destination device profiles,

wherein the color transformer adjusts the source and destination device profile interpreters based on the user preferences, and wherein the source and destination device profiles are not modified based on the user preferences.

Claim 55 (New): The system of claim 54, wherein the user preferences include at least one of illuminant functions and observer functions.

Claim 56 (New): A system comprising:

means for interpreting a source device profile to convert coordinates in a source device color space to a device-independent color space;

means for interpreting a destination device profile to convert coordinates in a destination device color space to the device-independent color space; and

means for generating a color map defining a relationship between the source and destination device color spaces based on the converted coordinates and user preferences specified by a user independently of the source and destination device profiles, wherein the source and destination device profiles are not modified based on the user preferences.

Claim 57 (New): The system of claim 56, wherein the user preferences include at least one of illuminant functions and observer functions.

Claim 58 (New): A method comprising:

interpreting a source device profile to convert coordinates in a source device color space to a device-independent color space;

interpreting a destination device profile to convert coordinates in a destination device color space to the device-independent color space; and

generating a color map defining a relationship between the source and destination device color spaces based on the converted coordinates and user preferences specified by a user independently of the source and destination device profiles, wherein the source and destination device profiles are not modified based on the user preferences.

Claim 59 (New): The method of claim 58, wherein the user preferences include at least one of illuminant functions and observer functions.